

# Staff Summary Report



City Council Meeting Date: 04/17/08

Agenda Item Number: 36

**SUBJECT:** This is the second public hearing for a Planned Area Development Overlay for 800 WEST located at 800 West University Drive

**DOCUMENT NAME:** 20080417dskko01

**PLANNED DEVELOPMENT (0406)**

**SUPPORTING DOCS:** Yes

**COMMENTS:** Request for **800 WEST (PL070513)** (Nancy Hawkes, Articulate Urban Homes, LLC, owner and applicant) for a Planned Area Development Overlay for four townhouses on approximately 0.24 net acres, located at 800 West University Drive in the R-4, Multi-Family Residential General District. The request includes the following:

**PAD07029 – (Ordinance 2007.86)** Planned Area Development Overlay to modify development standards for four residential units on individual lots on an overall +/- 0.24 net acre site, including the following: reduction in minimum individual lot area from 1,740 sf to 1,366 sf, increase in maximum individual lot coverage from 60 % to 64 %, reduction in individual lot setbacks from 20 ft to 0 ft (front), from 10 ft to 0 ft (side) and from 10 ft to 7 ft (rear)

**PREPARED BY:** Kevin O'Melia, Senior Planner (480-350-8432)

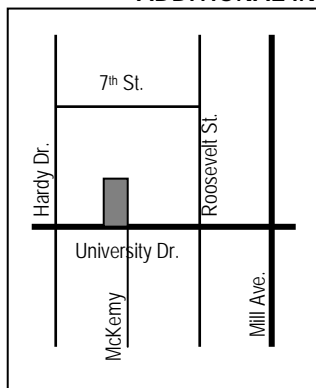
**REVIEWED BY:** Lisa Collins, Planning Director (480-350-8989)  
Chris Anaradian, Development Services Department Manager (480-858-2204)

**LEGAL REVIEW BY:** N/A

**FISCAL NOTE:** N/A

**RECOMMENDATION:** Staff – Approval, subject to conditions 1 - 4.  
Development Review Commission – approval for P.A.D. (6 – 0 vote)

## ADDITIONAL INFO:



|  |  |
|--|--|
| Site Area                                | +/- 0.27 gross acres, +/- 0.24 net acres   |
| Housing Type                             | four two-bedroom, three-story townhouses   |
| Residential Density                      | 14.8 d.u./acre (25 d.u./acre max. allowed)   |
| Bldg Area per d.u.                       | +/- 1,950 sf (live) and +/- 450 sf (garage)  |
| Bldg 1 <sup>st</sup> floor Area per d.u. | 863 sf   |
| Individual Lot Areas                     | 1,366 sf (lot 1), 1,500 sf (lots 2 & 3 each), 1,850 sf (lot 4), 4,456 sf (common tract A)              |
| Min. Lot Area per d.u.                   | 1,366 sf (PAD standard: reduce from 1,740 sf)  |
| Max. d.u. / Lot Coverage                 | 64 % lot 1 (PAD standard: increase from 60 %)  |
| Building Setbacks                        | 0 ft front, 0 ft side, 7 ft rear (P.A.D. standard: reduction from 20 ft front, 10 ft side, 10 ft rear) |
| Vehicle Parking                          | 9 spaces (9 minimum required)  |
| Bicycle Parking                          | 4 spaces (3 minimum required in bike commute area)   |
| Building Height                          | 36 ft (40 ft max. allowed)   |
| Landscape Area                           | 3,370 sf (2,255 sf at four d.u.'s + 1,115 sf at tract A)   |
| Landscape Coverage                       | 29.8 % lot 1, 31.6 % overall (25 % min. allowed)   |

- PAGES:**
1. List of Attachments
  - 2-4. Comments / Reasons for Approval
  5. Conditions of Approval
  6. History & Facts / Zoning & Development Code Reference

- ATTACHMENTS:**
1. Ordinance No. 2007.86
  - 2-3. Waiver of Rights and Remedies Form
  4. Location Map
  5. Aerial Photo
  6. Letter of Explanation—General
  7. Letter of Explanation—P.A.D. Overlay Request
  - 8-9. Neighborhood Meeting Summary Notes, September 21, 2005
  - 10-11. Memorandum from Neighbors, September 27, 2005
  12. Site plan
  13. P.A.D. Development Standards
  14. Landscape Concept Plan with 1<sup>st</sup> Floor Plan
  15. Landscape Design Narrative, Plant List and Entrance Sign Elevation
  16. 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> Floor Plans, Unit A
  17. 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> Floor Plans, Units B, C & D
  18. Building Elevations
  19. Building Sections
  20. Preliminary Grading & Drainage Plan
  21. Grading and Drainage Construction Notes, Runoff Volume & Retention Provided
  - 22-26. Site Photographs.

## COMMENTS:

The site is vacant and is located north of University Drive, directly across the street from the University / McKemy intersection. The site is between Hardy Drive (to the west) and Roosevelt Street (to the east). The General Plan 2030 projected land use is Mixed-Use and the projected maximum residential density is 25 dwelling units per acre. The density is consistent with the existing R-4, Multi-Family Residential General District and General Plan 2030. There are no existing entitlements on the site. Variances granted in August, 2000 for a previous, unexecuted residential development (Galway Bay) have been allowed to lapse. The development to north, west and east are multi-family residential. The development to the south, across University, is commercial.

A stumbling block to previous development attempts at this location is the lack of public sewer access. The applicant has remedied this problem by entering into an agreement with the property owner to the north for a sewer easement along the western border of the neighboring property to the northwest corner of this site. A private sewer line on site will then service the four townhouses.

The project features four residential townhouses, each on its own lot, with a common tract that serves each residential lot. The project request includes a Planned Area Development Overlay to increase lot coverage per dwelling, reduce lot area per dwelling and reduce dwelling unit building setbacks on the individual lots. City Council approval of the Planned Area Development Overlay is required in connection with this proposal. For further processing, a separate City Council approval of the Subdivision Plat is required to create the four lots and a common tract for the townhouses.

## Public Input and Comment

- A neighborhood meeting was held on September 21, 2005 at 7:00pm at the Westside Multi-Generational Center, 715 West Fifth Street, Tempe. Development Services Planning staff did not attend the meeting.
- See attached summaries of the meeting provided by the applicant and provided by neighbors attending the meeting.
  - As a result of neighborhood comment to increase street presence for the development, the design of Unit 1 south elevation facing University Drive has been modified with a second floor kitchen window box and a third floor master bedroom narrow gallery balcony. These features allow Unit 1 to engage the street from the upper levels while the right of way is free of any encroachment.
  - The neighbor suggestion to flip the site plan so the drive aisle and unit garages are on the west has not been followed. While the possible combination of drives with the adjacent development at 806 West University Drive has merit, the proposed site plan has its own advantages. Staff supports the applicant's site plan for the following reasons:
    - The three story dwellings will effectively shade the accessible walkway, drive aisle and garages in the afternoon. By contrast, a landscape buffer would have to mature before it could approach the shading ability of the buildings.
    - The major part of the west elevation of the dwellings, including most of the glazed surface, will effectively be shaded by the roofed balcony. By contrast, an exposed west-facing garage is a "hot box" that will adversely affect the climate control in the attached dwelling.
- Given the date of the neighborhood meeting, the Development Review Commission requested the applicant conduct an "open house" to display the design and meet with interested neighbors prior to review of the Planned Area Development Overlay by City Council. After notification by mail, the applicant held an open house on April 2, 2008 from 7:00pm to 8:00pm at the Westside Multi-Generational Center. Two Development Services staff members also attended. The public did not attend.

## Planned Area Development Overlay

Three of the Development Standards for the R-4 District (Lot Size, Lot Coverage and Setbacks) are proposed for modification due to the creation of the four small "for-sale" lots of 800 West. Planning Staff supports these modifications for the individual lots of 800 West due to the positive design features of the site plan. The modified Development Standards are as follows:

- **MINIMUM LOT AREA:** The proposed minimum lot area per dwelling unit is reduced to accommodate the size of Lots 1, 2 and 3. The Lot 1 size is 1,366 sf and Lots 2 and 3 are 1,500 sf each. Lot 4 meets the standard for the R-4 District
- **BUILDING / LOT COVERAGE:** The building / lot coverage standard is increased for Lot 1 from 60 percent to 64 percent. Lots 2, 3 and 4 meet the standard for the R-4 District.
- **BUILDING SETBACKS:** The rear-yard setbacks are reduced from 10 ft to 7 ft along the west boundary of the development to allow a (non-required) common tract tree buffer on the east boundary of the development, while maintaining a private yard tree buffer on the north and west boundaries. The front-yard (east) setback for each lot, facing the common tract, is reduced from 20 ft to 0 ft. The side-yard (south) setback for Lot 1 is reduced from 10 ft to 0 ft to allow Unit A of Lot 1 to extend to the property line facing University Drive. This property line is located 15'-0" to the north of the existing property line to allow for right-of-way dedication. The common wall side setback between Units A and B and Units C and D meets the standard for the R-4 District.

The following table indicates the proposed Planned Area Development Overlay standards for 800 West in comparison with the Development Standards for the R-4 Multi-Family Residential General District. The parking standard in the Multi-Family residential category, in comparison with what parking is provided, is also indicated at the bottom of the table. Planned Area Development Overlay standards that modify the underlying R-4 District standards are highlighted in bold text.

| Building & Site Standard   | R-4   | PAD Overlay   |
|--|---|---|
| Building Height and Step-Back Standards<br>Maximum Height per ZDC Table 4-202(B)<br>Proposed Ridge Height<br>Building Height Step-Back Required Adjacent to SF or MF District  | 40 ft<br>-<br>Yes   | -<br>36 ft<br>Yes   |
| Lot Standards<br>Minimum Lot Area / Dwelling Unit per ZDC Table 4-202 (B)<br>Proposed Reduction in Minimum Lot Area per P.A.D.<br>Maximum Lot Coverage<br>Proposed Increase in Max. Lot Coverage = (1 <sup>st</sup> floor area over min. lot area) = ( 863sf / 1,366 sf)   | 1,740 sf<br>-<br>60 %<br>-  | -<br><b>1,366 sf</b><br>-<br><b>64 %</b>  |
| Landscape Standards<br>Minimum Lot Landscape Area / Net Lot Area per ZDC Table 4-202(B)<br>Minimum Lot Landscape Area per P.A.D. = (407 sf / 1,366 sf)<br><br>Minimum Site Landscape Area / Net Site Area per ZDC Table 4-202(B)<br>Minimum Site Landscape Area per P.A.D. = (3,370 sf / 10,672 sf)  | 25 %<br>-<br><br>25 %<br>-  | -<br>29.8 %<br><br>-<br>31.6 %  |
| Setback Standards<br>Front Building per ZDC Table 4-202(B)<br>Front Open Structure Support per ZDC Table 4-202(B)<br>Front (East) Building and Open Structure Support per P.A.D.<br><br>Side and Street Side Building Wall per ZDC Table 4-202(B)<br>Side Open Structure Support per ZDC Table 4-202(B)<br>Side Building Common Wall per ZDC Table 4-202(B)<br>Side (South and North) Building Wall and Open Structure Support per P.A.D.<br><br>Rear (West) Building Wall and Open Structure Support per ZDC Table 4-202(B)<br>Rear (West) Building and Open Structure Support per P.A.D. | 20 ft<br>15 ft<br>-<br><br>10 ft<br>5 ft<br>0 ft<br>-<br><br>10 ft<br>- | -<br>-<br><b>0 ft</b><br><br>-<br>-<br>-<br><b>0 ft</b><br><br>-<br><b>7 ft</b> |
| Parking Standard   | ZDC.Tab.<br>4-603 E   | PAD Overlay   |
| Vehicle Parking Standard<br>Two bedroom (2.0 spaces) x Four Dwelling Units per ZDC Table 4-603(E)<br>Proposed Resident Parking Quantity (Two per Dwelling Unit Garage)<br>Guest ( 0.2 spaces) x Four Dwelling Units<br>Proposed Guest Parking Quantity in Common Tract<br>Total  | 8<br>-<br>0.8<br><u>-</u><br>9  | -<br>8<br>-<br><u>1</u><br>9  |
| Bicycle Parking Standard<br>Two bedroom (0.75 space per unit) x Four Dwelling Units per ZDC Table 4-603(E)<br>Proposed Resident/Guest Parking Quantity (One per Dwelling Unit Garage)<br>Total   | 3<br><u>-</u><br>3  | -<br><u>4</u><br>4  |

Site plan features that support the modification of the R-4 Development Standards include the following:

- The common tract containing the drive aisle effectively becomes the front yard while the organization of the four units into two pairs allows side yards in addition to the rear courtyards of three of the four units (Lots 2, 3 and 4).
- Spatially, each of the four units has one side yard where Unit A on Lot 1 uses the University Drive frontage as its side-yard and the other three units have their own side-yard plus the adjacent portion of common tract.
- The common tract configuration allows a surface on-site storm water retention concept. An extensive sub-surface retention structure, which interferes with planting and complicates site maintenance, is thereby avoided.

## **Site Layout**

The overall site plan makes the best use of solar orientation by providing afternoon shade on the driveway and walkway entrance surfaces and by extensive roofed balconies to shade the west elevations of the units. The individual solar orientation of each of the units follows the best layout available for a small site with vehicle access to the south. The site plan allocates room for landscape tree screens on the east and north, which buffer this development from the rear windows of adjacent apartment units, to the benefit of both developments. Private back yard trees are also provided in the recesses of the west elevations. The grading and drainage concept limits sub-surface structures to a dual chamber drywell, which increases the opportunity for planting.

## **Architecture**

The building elevations replicate the craftsman movement of a bygone era, but make use of exterior plaster and fiberboard materials that are appropriate to this climate and contribute to building longevity. The project is akin to the recently completed Abby Lane (University and Beck) townhouses at 1200 West University and to the proposed townhouse development at the historic Farmer Goodwin (University and Farmer) property. The use of a pitched roof is also found in the building immediately west of 800 West. Like these developments, 800 West is an echo of the architectural character of older residential neighborhoods including Maple-Ash and Mitchell Park.

## **Conclusion**

On a small site, previously infeasible for independent development because of the lack of public sewer access, the applicant and design team have laid the groundwork to deliver a small, well-designed residential in-fill project. Planning Staff recommends approval of the requested Planned Area Development Overlay.

## **REASONS FOR APPROVAL:**

1. The project meets the Projected Residential Density for this site. While the project is not by itself mixed use, the insertion of a development of individually owned residences fits the zoning district at this location and bolsters the intertwined residential and commercial character emerging on University Drive.
2. The project will meet the Development Standards required under the Zoning and Development Code, including those modified by the Planned Area Development Overlay under the provisions of the Code.
3. The Planned Area Development Overlay has allowed flexibility in development standards to foster a well-designed project.
4. The Planned Area Development Overlay is consistent with the approval criteria set forth in the Zoning and Development Code Section 6-305.

**PAD07029**

**CONDITIONS OF APPROVAL:**

1. A building permit shall be obtained on or before April 17, 2010 or the zoning of the property may revert to that in place at the time of application, subject to a public hearing.
2. The property owner(s) shall sign a waiver of rights and remedies pursuant to A.R.S. §12-1134 that may now or in the future exist, releasing the City from any potential claims under Arizona's Private Property Rights Protection Act, which shall be submitted to Development Services Department no later than thirty (30) calendar days after the date of approval (May 17, 2008), or the zoning approval (the Planned Area Development Overlay) shall be null and void.
3. Provide 8'-0" wide continuous clearance along the west property line for a private sanitary sewer line. Do not locate balcony columns, column or west perimeter wall foundations or trees within this area. Private yard walls may traverse the 8'-0" wide continuous clearance. Second floor balconies may overhang the clearance up to 7'-0" from the west property line.
4. The Planned Area Development Overlay exhibits for 800 West shall be put into proper engineered format and kept on file with the Development Services Department. The Development Standards, including those modified by the Overlay, shall be specifically enumerated on the cover sheet. Obtain Development Services Manager's approval of Planned Area Development Overlay prior to issuance of building permits. This document is not required to be recorded at the County Recorder's office.

**HISTORY & FACTS:**

800 West University Drive:

The site is Tract 24 of State Plat No. 12 Amended.  
The Parcel number for the site is 124-34-024-B

|                    |   |
|--------------------|---|
| December 1963      | Property record card indicates plumbing installation for a (now demolished) residence.  |
| August 1, 2000     | <p>The Hearing Officer approved the following variance requests (BA000209) by Galway Bay Condominiums. The site is in the R-4, Multi-Family District.</p> <ol style="list-style-type: none"><li>Variance to reduce the required east and west side yard setbacks from 10' to 7'-4".</li><li>Variance to reduce the required front yard setback from 25' to 15'.</li><li>Variance to waive the required parking lot landscape islands at the end of parking rows.</li><li>Variance to waive the required pedestrian walkway from the street to the main buildings.</li><li>Variance to reduce the required courtyard separation between buildings B (west) &amp; B (east) from 40' to 29'.</li><li>Variance to reduce the required courtyard separation between buildings B &amp; A from 40' to 32'.</li><li>Variance to reduce the required parking space width from 8'-6" to 8'-2".</li><li>Variance to waive the required 3' wide end parking space maneuvering area.</li></ol> <p>Note: These variances were allowed to lapse.</p> |
| August 15, 2000    | <p>The Hearing Officer approved the variance request (BA000221) by Galway Bay Condominiums to reduce the required rear yard setback from 15' to 13'. The site is in the R-4, Multi-Family District.</p> <p>Note: This variance was allowed to lapse.</p>  |
| September 21, 2005 | A neighborhood meeting to present the 800 West University Townhouse Development Project was held at the Westside Multi-Generational Center. The meeting was attended by three members of the development team and three interested neighbors. Meeting Summary by the development team and Memorandum from Neighbors are included in the attachments to this report.   |
| December 22, 2005  | Cross-property easement agreement between AZAB, L.L.C. (Grantor) and Nancy Fagan Hawkes and Robert Keith Hawkes (Grantees) recorded at the Maricopa County Recorder's Office. The agreement adds a sanitary sewer easement extension along the west boundary of 124-34-024-A to the northwest corner of 124-34-024-B. 124-34-024-A is the parcel to the north and east of 800 West and 124-34-024-B is 800 West. This sewer easement allows 800 West to access an 8" public sanitary sewer that runs parallel to University Drive within the 124-34-024-A property.   |
| March 12, 2008     | The Development Review Commission approved the building elevations, site plan and landscape plan for 800 West located at 800 West University Drive in the R-4, Multi-Family Residential General District (6-0 vote). By the same vote the Development Review Commission recommended approval of the P.A.D. overlay request to the City Council.   |
| April 2, 2008      | The applicant conducted an open house at the Westside Multi-Generational Center to present the townhouse design and meet with interested neighbors, in accordance with direction of the Development Review Commission. The applicant notified neighbors via mail of the meeting and indicated receipt of phone calls from two interested members of the public. However, members of the public did not attend the open house.   |
| April 3, 2008      | The City Council introduced and held the first public hearing for a Planned Area Development Overlay for 800 West located at 800 West University Drive.   |

**ZONING AND DEVELOPMENT CODE REFERENCE:**

Section 6-305, Planned Area Development Overlay

---

ORDINANCE NO. 2007.86

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF TEMPE, ARIZONA, AMENDING THE CITY OF TEMPE ZONING MAP, PURSUANT TO THE PROVISIONS OF THE ZONING AND DEVELOPMENT CODE PART 2, CHAPTER 1, SECTION 2-106 AND 2-107, RELATING TO THE LOCATION AND BOUNDARIES OF DISTRICTS.

\*\*\*\*\*

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF TEMPE, ARIZONA, as follows:

**Section 1.** That the Zoning Map of the City of Tempe, pursuant to the provisions of Zoning and Development Code, Part 2, Chapter 1, Section 2-106 and Section 2-107, is hereby amended by removing the below described property from the R-4, Multi-Family Residential General District and designating it as R-4 (PAD), Multi-Family Residential General District with a Planned Area Development Overlay on +/- 0.24 acres.

**LEGAL DESCRIPTION**

A parcel of land being located in Southeast quarter of Section 16, Township 1 North, Range 4 East of the Gila and Salt River Base and Meridian, Maricopa County, Arizona, more particularly described as follows:

The West 85.78 feet of the South 146.4 feet of the East 221 feet of Tract 24, State Plat No. 12, according to the plat of record in the office of the County Recorder of Maricopa County, Arizona in Book 69 of Maps, Page 38, and being located in the Southeast quarter of Section 16, Township 1 North, Range 4 East of the Gila and Salt River Base and Meridian, Maricopa County, Arizona

**Section 2.** Further, those conditions of approval imposed by the City Council as part of case **PAD07029 – 800 West** are hereby expressly incorporated into and adopted as part of this ordinance by this reference.

**Section 3.** Pursuant to City Charter, Section 2.12, ordinances are effective thirty (30) days after adoption.

PASSED AND ADOPTED BY THE CITY COUNCIL OF THE CITY OF TEMPE, ARIZONA, this \_\_\_\_\_ day of \_\_\_\_\_, 2008.

\_\_\_\_\_  
Mayor

ATTEST:

\_\_\_\_\_  
City Clerk

APPROVED AS TO FORM:

\_\_\_\_\_  
City Attorney



**WHEN RECORDED RETURN TO:**

**City of Tempe  
Development Services Dept  
c/o Kevin O'Melia  
31 East 5<sup>th</sup> Street  
Tempe, Arizona 85281**

**WAIVER OF RIGHTS AND REMEDIES  
UNDER A.R.S. §12-1134**

This Waiver of Rights and Remedies under A.R.S. § 12-1134 (Waiver) is made in favor of the City of Tempe (City) by \_\_\_\_\_  
\_\_\_\_\_(Owner/s).

Owner acknowledges that A.R.S. § 12-1134 provides that in some cases a city must pay just compensation to a land owner if the city approves a land use law that reduces the fair market value of the owner's property (Private Property Rights Protection Act).

Owner further acknowledges that the Private Property Rights Protection Act authorizes a private property owner to enter an agreement waiving any claim for diminution in value of the property in connection with any action requested by the property owner.

Owner has submitted Application No. \_\_\_\_\_ to the City requesting that the City approve the following:

\_\_\_\_ GENERAL PLAN AMENDMENT  
\_\_\_\_ ZONING MAP AMENDMENT  
\_\_\_\_ **X** PAD OVERLAY  
\_\_\_\_ HISTORIC PRESERVATION DESIGNATION/OVERLAY  
\_\_\_\_ USE PERMIT  
\_\_\_\_ VARIANCE  
\_\_\_\_ DEVELOPMENT PLAN REVIEW  
\_\_\_\_ SUBDIVISION PLAT/CONDOMINIUM PLAT  
\_\_\_\_ OTHER \_\_\_\_\_  
*(Identify Action Requested))*

for development of the following real property (Property):

Parcel No. \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
*(Legal Description and Address)*

By signing below, Owner voluntarily waives any right to claim compensation for diminution in Property value under A.R.S. §12-1134 that may now or in the future exist if the City approves the above-referenced Application, including any conditions, stipulations and/or modifications imposed as a condition of approval.

This Waiver shall run with the land and shall be binding upon all present and future owners having any interest in the Property.

This Waiver shall be recorded with the Maricopa County Recorder's Office.

Owner warrants and represents that Owner is the fee title owner of the Property, and that no other person has an ownership interest in the Property.

Dated this \_\_\_\_\_ day of \_\_\_\_\_, 2008.

\_\_\_\_\_  
(Signature of Owner)

\_\_\_\_\_  
(Printed Name)

\_\_\_\_\_  
(Signature of Owner)

\_\_\_\_\_  
(Printed Name)

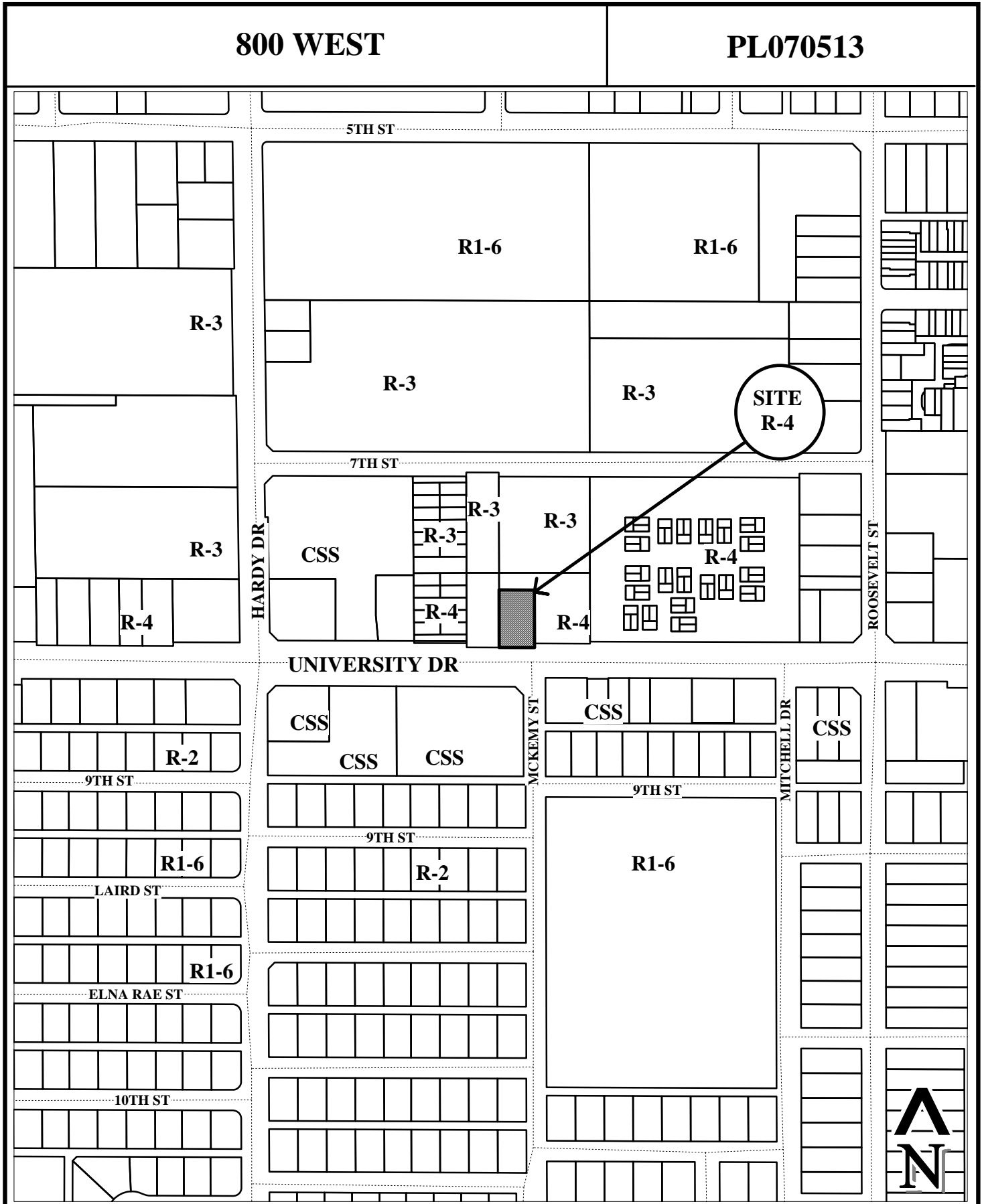
State of Arizona                    )  
  ) ss  
County of \_\_\_\_\_ )

SUBSCRIBED AND SWORN to before me this \_\_\_\_\_ day of \_\_\_\_\_, 2008, by

\_\_\_\_\_  
\_\_\_\_\_.

\_\_\_\_\_  
(Signature of Notary)

(Notary Stamp)





800 WEST (PL070513)

# 800 WEST

A COMMUNITY OF FOUR UPSCALE TOWNHOMES AT 800 WEST UNIVERSITY DRIVE IN TEMPE

## LETTER OF EXPLANATION—GENERAL

Nancy Hawkes of Articulate Urban Homes, LLC, plans to build four luxury townhouses at 800 West University in Tempe.

Each of the four upscale arts & crafts style townhomes will have over 2000 square feet of living area. The top floor of each three-story structure will be dormered to limit overall height. Each unit will feature an ample two-car garage, a covered porch, covered terrace and a small walled yard. Floor plans allow for two master bedrooms with a family/office/media room on the ground floor. Higher quality building materials will be used, including green building materials. We are currently investigating seeking LEEDS certification for the project.

This project is very much in keeping with the city's General Plan and with the Strategic Plan for Northwest Tempe. These townhouses will be an asset to the community for several reasons:

- This medium-high density project will contribute to an increase in population density in Northwest Tempe, which is one of the goals of the city's General Plan 2030. (GP2030 p. 28-30) It will also provide higher-income housing within one of the city's Projected Employment Nodes. (GP2030 p. 124)
- The General Plan 2030 survey showed that Tempe residents' top two priorities are "neighborhood maintenance and improvement" and the "need for infill and reuse of vacant land and buildings". This project meets both of these priorities. (GP2030 p. 74)
- The development is very much in keeping with the goals of the Northwest Tempe Neighborhoods Joint Strategic Plan (NTNJSP). Unlike most of the new condominiums/townhouses being built in the area, which are small and are intended for students, these homes will fill the needs of families and established professionals, drawing such buyers to the area—and their stability as well. (NTNJSP p. 45)
- Because of the size and upscale nature of the units, it is expected that the townhouses will remain owner-occupied and not renter-occupied. (NTNJSP p. 45)
- Because the project will have a homeowners' association, the property will remain well-landscaped and well-maintained. (NTNJSP p. 45) The project's traditional styling and friendly elevations will increase the feeling of community in the area. (NTNJSP p. 37)
- The green nature of the project will reflect positively on Tempe's commitment to sustainable design and will hopefully encourage other environmentally friendly projects in the area. (GP2030 p. 93) (NTNJSP p. 51)

We believe that this project is exactly in keeping with the goals and desires of the City of Tempe and the residents of the Northwest neighborhoods. It will improve a section of University Drive which is currently somewhat blighted. 800 West has been designed with the community's interests in mind and we look forward to working in partnership with the city and neighborhood to create homes that complement and engage the community.

# 800 WEST

A COMMUNITY OF FOUR UPSCALE TOWNHOMES AT 800 WEST UNIVERSITY DRIVE IN TEMPE

## LETTER OF EXPLANATION—PAD OVERLAY

In designing the project to be built at 800 West University Drive, we have strived to create a development that will be functional, attractive, and in keeping with the community's goals and expectations.

During the design phase, a great deal of work has gone into efforts to conform to Tempe's R-4 zoning development standards; and the project complies with these standards in almost every way. However, we have found it necessary to seek a PAD Overlay because we believe that the best design for the project requires that we make a few exceptions.

We are asking the city to waive the front setback requirement, allowing the building structure to extend to the right-of-way line parallel to University Drive. The precedent for this has been set by several other recent projects in the area, which extend even closer to the street than this.

Three additional exceptions we are requesting have been necessitated by the lot subdivision and are not at issue when the site is considered as a whole. Specifically, the buildings currently fit within side and rear R-4 setbacks but will not fit within the setbacks of the new, smaller lots. Similarly, the maximum building footprint for Lot 1 will exceed the 60% allowed for R-4 without PAD; and the minimum lot area per residence will be reduced from 1,740 to 1,366 sf. However, as mentioned above, all of these exceptions are a result of creating individual lots for the townhomes.

It should be noted that these townhomes have been designed as two bedroom units and are expected to remain as two bedroom units. Previous iterations of the project allowed the option of creating a third bedroom on the ground floor but the need for increased parking made this option unviable. We have altered the bathroom design and eliminated a closet on the ground floor accordingly.

On another note, we would like to mention that we seriously considered and attempted to meet the recommendations made by those who attended our neighborhood meeting. However, our request to extend a covered porch into the right-of-way was denied by city staff. Consequently, we made changes to the street side of Unit 1 to give it a more welcoming appearance. As an alternative to the covered porch, we have popped out the kitchen window on the second floor and added a European balcony on the third floor.

We would also like to mention something about the history of this parcel. It has changed hands many times over the years and several different projects have been proposed for it. However, it seems that each new owner of the parcel eventually learned that the lot had no access to sewer and therefore could not be developed. We also were unaware of this problem when the lot was sold to us but we went to great measures and expense to secure an easement agreement with one of the neighboring properties.

We are asking the city to grant this PAD Overlay request because we believe this project is an attractive development that will increase density in the area and impact the community in a positive way, meeting the objectives of the Northwest Tempe Neighborhoods Joint Strategic Plan and the city's General Plan 2030.



**800 WEST UNIVERSITY TOWNHOUSE DEVELOPMENT PROJECT  
NEIGHBORHOOD MEETING—WEDNESDAY SEPTEMBER 21, 2005**

**Westside Multigenerational Building • 715 W. 5th Street • Tempe, AZ 85281**

**MEETING SUMMARY NOTES**

Participants: Ted Hawkes (developer)  
Nancy Hawkes (developer)  
Elizabeth Hawkes (developer)  
Margaret Stout (neighbor)  
PD Lucier (neighbor)  
Kirby Spitler (neighbor)

The following meeting notes are intended to be a summary of the discussions at the meeting.

Ted Hawkes of Articulate Urban Homes, LLC, conducted introductions and welcomed the neighbors to the meeting. At that time only PD Lucier and Margaret Stout had arrived. He thanked the guests for coming and encouraged them to share their ideas and concerns. Each was provided with a packet which included reduced versions of the proposed project's site plan, elevations, floor plans, etc. A copy of that packet is included with this report.

Ted then made a very brief explanation of the scope of the project and encouraged the invitees to look the packets over.

Margaret Stout stated that she liked the project with the exception of the south elevation. She felt it was uninviting and did not engage the street. She suggested wrapping the building's porch around to the south side to make it more welcoming.

Nancy Hawkes explained that the city has a right-of-way on the first 15 feet of the property and so the structure should not extend into that right-of-way. She also explained that it had been necessary to seek a PAD overlay just to build up to that line.

Margaret explained that other developments had encroached into that 15-foot right-of-way and that she felt it would be acceptable for this project to also encroach into that right-of-way. She said that it was her understanding that federal funds had been approved to convert University Drive into a more pedestrian street, giving it a Main Street feel. She again encouraged the Hawkes's to add a porch on the street side to tie the project in with the street and give it more of a community feel.

OCT 12 2005

PD Lucier agreed, saying the goal is to create more community, not less. She suggested that in requesting the PAD overlay, the Hawkes's design the project so that the porch extends into the right-of-way. She mentioned that other projects on University Drive had done this.

Kirby Spitler arrived at about this time and joined the conversation. He asked the Hawkes if they had obtained a copy of the Strategic Plan Northwest. The Hawkes had never heard of such a report. He talked about the vision the residents and city have for the area, how they would like to reduce traffic on University, using the outside lanes for landscaping, parking and pull-outs.

Margaret suggested that the porch added to the south elevation be raised, giving it a more private feel even though it faces the street.

Nancy described the 8-foot walls she envisions for the west side of the property, saying she would like to build low rock walls with wrought iron bars.

Margaret suggested flipping the site plan to change the buildings' orientation so the elevation with fewer windows would face west. Nancy pointed out that the first and second floor have covered porches with 8-foot overhangs and the third floor dormer windows open into dead space. Kirby mentioned that a southern exposure is ideal and Nancy said she had tried to design the project that way but was frustrated in her attempts because the property is narrow along University.

Kirby mentioned that a somewhat similar 10-unit townhouse project is being developed at the Farmer-Goodwin mansion.

Then there was a discussion about using "green" design and building materials for this project. Kirby explained the LEED's program and mentioned some resources. The group discussed the types of materials and design that might be considered green.

Margaret again mentioned flipping the project so the structures face east instead of west. She said that if the parcel directly to the west could be obtained by the Hawkes at some time in the future, the one driveway could serve both parcels.

Kirby discussed using underground cement pipes for water retention, as was done at The Vale. Kirby suggested ways to find out more about LEEDs.

Nancy and Ted thanked everyone for attending and for sharing their opinions and ideas. They told PD, Margaret and Kirby that they would stay in touch and keep them informed about the progress of the project. The meeting was adjourned.

OCT 12 2005



## Memorandum

September 27, 2005

To: City of Tempe Development Services  
Ryan Levesque  
Chris Anaradian

From: Margaret Stout, Kirby Spitler, and PD Lucier

Re: 800 West University PAD

We had the pleasure to meet with the owner/developer of the proposed town homes at 800 W. University Drive the evening of September 21. First, let us compliment the applicants for having a sign-in sheet and a representative to take notes. Furthermore, their open attitude toward problem-solving and creative design and construction solutions was refreshing. Kudos to them for good public process!

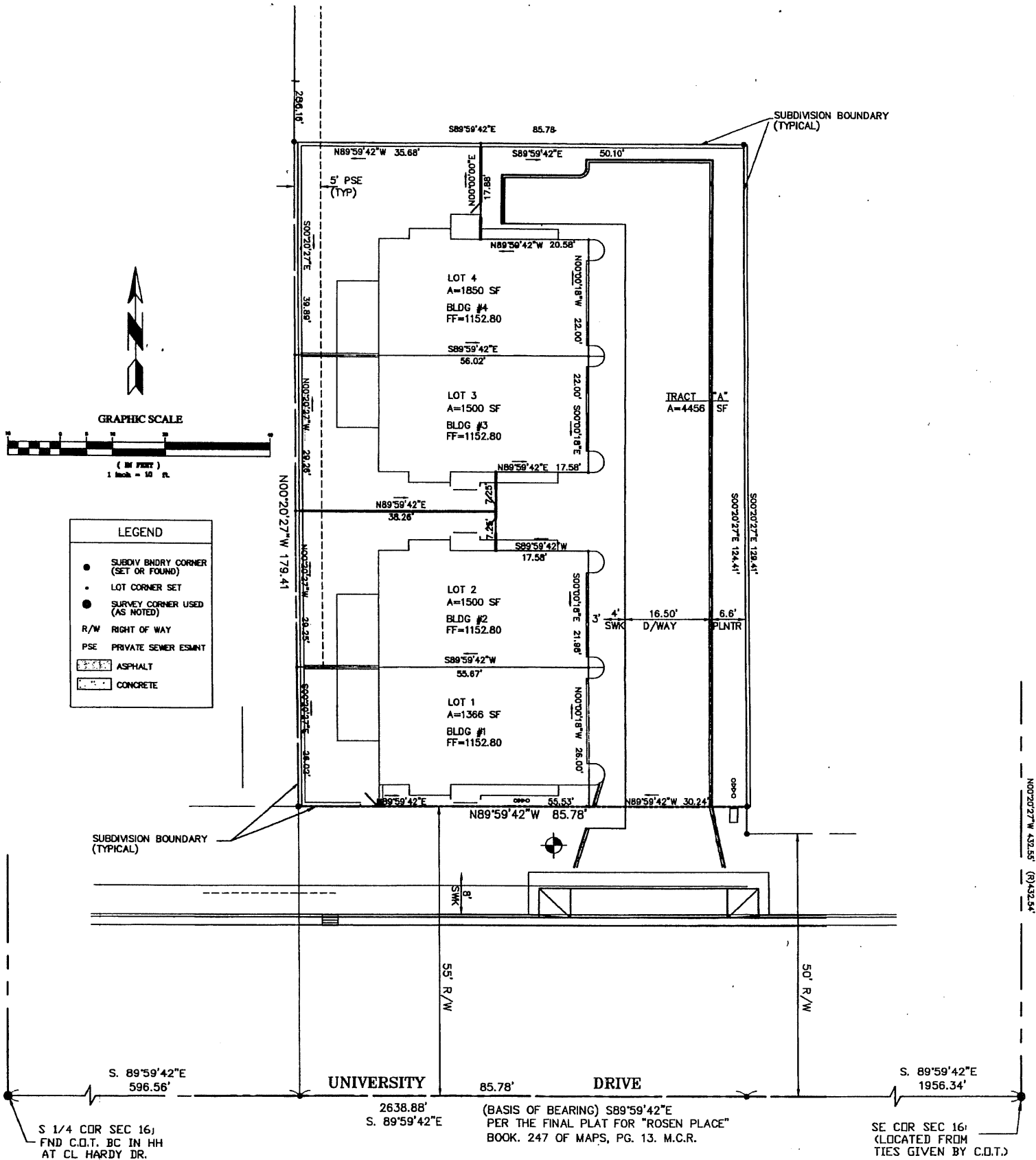
We were very disappointed to learn that these applicants were not made aware of either the Riverside/Sunset or Northwest Tempe Neighborhood Strategic Plans, nor of the University Drive Corridor Study. This lack of consideration of long-range plans indicates that City staff continue to work in a vacuum, disregarding planning policy beyond the Zoning and Development Code. The intention of building a strong generalist staff is certainly undermined by this behavior, as is the goal of engaging the public in planning and development decisions. This is also a disservice to developers who are continually taken by surprise with the community's insistence on meeting the principles of these approved plans.

In regard to the initial application, we have a number of comments that were discussed with the applicant in detail:

1. We encourage the pursuit of a joint development with the property owner to the west (via assemblage), enabling a more cohesive development of the University Drive street frontage, better access for sewer and circulation from 7<sup>th</sup> Street, and increased open space for each unit.
2. Barring this, we recommend a reversed placement of the driveway as shown to the *west* side of the lot, with garages of the units facing west for energy efficiency purposes. The use of true clearstory windows or shading devices should be explored on the west elevations, as the energy efficiency as configured is rather poor.
3. We support the use of 8 foot wrought iron fencing on rock piers as proposed, but *do not* support the use of block walls or other privacy fencing. Similarly, we support a lower (4 foot) wrought iron fencing to delineate the private outdoor spaces of the units, but *not* the use of privacy fencing. Our purpose is to build a sense of community and support crime prevention principles of "eyes on the space."

4. We strongly support the proposed use of turf stone as a vehicular paving material and water drainage solution, and encourage all other retention to be placed away from the street frontage, underground if possible. We would *not* support impervious paving materials on this small site.
5. We *strongly request* an amendment to the University Drive south elevation to include an elevated porch and more prominent entrance design treatment. If possible, it would be preferable to have the *front* face the street—which is shown as the west elevation in the application. To accommodate this design change, the applicant should be given use of the City’s requested 15 foot right of way. A policy decision was made nearly a decade ago that University Drive would not be widened, and all subsequent development proposals on both sides of the street have gone forward with the City abandoning this entitlement. The goal is to create a pedestrian-friendly corridor. *This applicant should be given the same benefits as those who have come before them—especially given the site limitations.*
6. In regard to landscaping requirements along the street frontage, we request a planted 8 foot landscape strip with street trees at the curb, with an eight-foot sidewalk behind it, as can be seen on the north side of 5<sup>th</sup> Street in the same neighborhood. We believe this is the design called for in the University Drive Corridor study. This should leave room for additional landscaping around the front porch as described. *The applicant should cover these improvement costs in exchange for the use of the City’s 15 foot right of way.*
7. We discussed our desire for new projects in our neighborhoods to be sustainable buildings. Green building is the fastest growing segment of the construction industry. The applicant was quite interested in the concept, although not very knowledgeable. We suggested that some level of LEED certification would be appropriate and explained the LEED approach. Discussion focused on site design, energy conservation and indoor air quality. Some credits can be achieved simply by meeting Tempe ordinance requirements while others, like indoor air quality, will be appealing to prospective buyers.

We appreciate the opportunity for dialogue early in the PAD process, and look forward to coming iterations of the proposed project. It sets a promising standard in regard to both process and design for future redevelopment along University Drive.



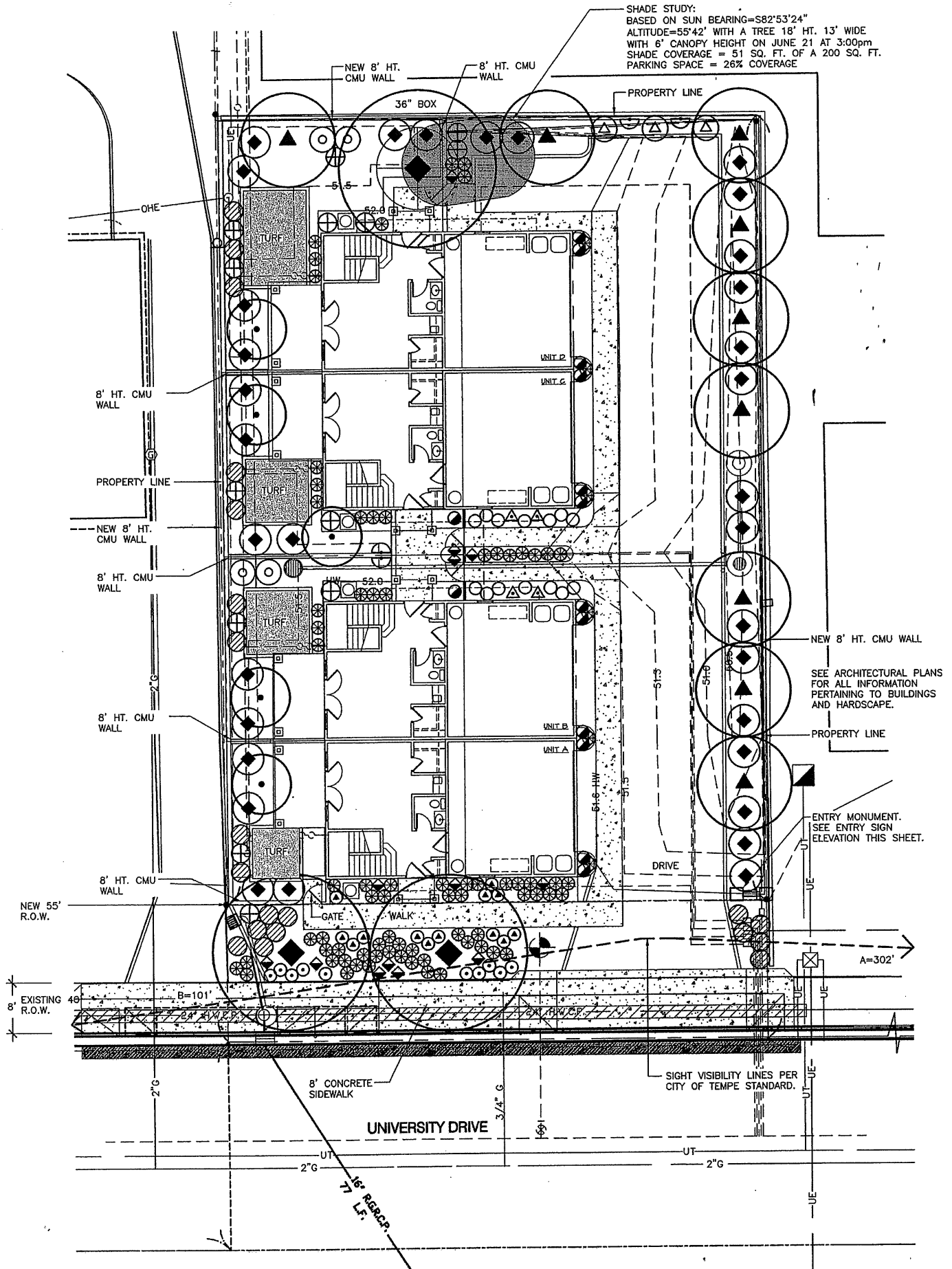
# PLANNED AREA DEVELOPMENT OVERLAY OF 800 WEST TOWNHOMES DEVELOPMENT STANDARDS

| ITEM                               | EXIST ZONING<br>R4 | PROPOSED<br>R-4PAD |
|------------------------------------|--------------------|--------------------|
| DENSITY (DU/ACRE)                  | 25                 | 16.7               |
| MIN LOT AREA PER DU (SF)           | 1,740 SF.          | 1,366 SF.          |
| BLDG HEIGHT MAX (FT)               | 40 FT.             | 36 FT.             |
| MAX LOT COVERAGE (% OF NET SITE)   | 60%                | 64%                |
| MIN LANDSCAPE AREA (% OF NET SITE) | 25%                | 31%                |
| BLDG SETBACKS                      |                    |                    |
| <u>FRONT</u>                       |                    |                    |
| BLDG WALLS (RESIDENCES)            | 20 FT.             | 0 FT.              |
| <u>SIDE</u>                        |                    |                    |
| BLDG WALLS (RESIDENCES)            | 10 FT.             | 0 FT.              |
| PORCH, BALCONY, PATIO              | 5 FT.              | 0 FT.              |
| <u>REAR</u>                        |                    |                    |
| BLDG WALLS (RESIDENCES)            | 10 FT.             | 7 FT.              |
| PARKING                            |                    |                    |
| VEHICLES (SPACES)                  | 9 SPACES           | 9 SPACES           |
| BICYCLES (SPACES)                  | 3 SPACES           | 4 SPACES           |

## DEVELOPMENT AS DESIGNED

UNIT TYPE: TWO BEDROOM TOWNHOUSE  
 UNIT QUANTITY: FOUR  
 LAND USE: SINGLE FAMILY RESIDENTIAL  
 GROSS AREA = 0.27 AC  
 NET AREA = 0.24 AC  
 GROSS DENSITY = 14.8 DU/ AC  
 NET DENSITY: 16.7 D.U./AC.  
 BLDG. CONSTRUCTION TYPE: V-N  
 BLDG. COVERAGE OF OVERALL NET SITE = 33%  
 BLDG. FIRE PROTECTION: HYDRANT  
 CLOSEST FIRE HYDT: SE COR OF SITE  
 OFF STREET PARKING: 8 (GARAGE) 1(GUEST)

SHADE STUDY:  
 BASED ON SUN BEARING=82°53'24"  
 ALTITUDE=55°42' WITH A TREE 18' HT. 13' WIDE  
 WITH 6' CANOPY HEIGHT ON JUNE 21 AT 3:00pm  
 SHADE COVERAGE = 51 SQ. FT. OF A 200 SQ. FT.  
 PARKING SPACE = 26% COVERAGE





















# LANDSCAPE CONCEPT PLAN

SCALE: 1" = 10'-0"



## PROPOSED PLANT LIST

| SYM   | BOTANICAL NAME /<br>COMMON NAME  | SIZE        | QTY        | REMARKS                    |
|---|--|-------------|------------|----------------------------|
| <u>TREES</u>  |  |             |            |                            |
|     | ACACIA STENOPHYLLA<br>SHOESTRING ACACIA  | 24" BOX     |            |                            |
|    | CAESALPINIA MEXICANA<br>MEXICAN BIRD OF PARADISE   | 15 GAL.     |            |                            |
|     | QUERCUS VIRGINIANA 'HERITAGE'<br>'HERITAGE' LIVE OAK   | 24"/36" BOX |            |                            |
| <u>SHRUBS, GROUND COVERS, AND ACCENTS</u>   |  |             |            |                            |
|    | ALOE BARBADENSIS<br>MEDICINAL ALOE   | 3/5 GAL.    |            |                            |
|    | ALOE X 'BLUE ELF'<br>'BLUE ELF' ALOE   | 3/5 GAL.    |            |                            |
|    | BOUGAINVILLEA SP. 'LA JOLLA'<br>'LA JOLLA' BOUGAINVILLEA   | 5 GAL.      |            | ON TRELLIS - TRAIN TO WALL |
|    | BULBINE FRUTESCENS<br>BULBINE  | 1 GAL.      |            |                            |
|    | HYMENOXYS ACAULIS<br>ANGELITA DAISY  | 1 GAL.      |            |                            |
|    | LANTANA SP. 'NEW GOLD'<br>'NEW GOLD' LANTANA   | 1 GAL.      |            |                            |
|    | LEUCOPHYLLUM CANDIDUM 'THUNDER CLOUD'<br>'THUNDER CLOUD' SAGE  | 5 GAL.      |            |                            |
|   | LEUCOPHYLLUM REVOLUTUM 'HOUDINI'<br>'HOUDINI' SAGE   | 5 GAL.      |            |                            |
|  | MUHLENBERGIA CAPILLARIS 'REGAL MIST'<br>'REGAL MIST' MUHLY   | 5 GAL.      |            |                            |
|  | PEDILANTHUS MACROCARPUS<br>LADY'S SLIPPER  | 5 GAL.      |            |                            |
|  | RUELLIA BRITTONIANA 'KATIE'<br>KATIE'S RUELLIA   | 1 GAL.      |            |                            |
|  | RUELLIA PENINSULARIS<br>BAJA RUELLIA   | 5 GAL.      |            |                            |
|  | ZEPHYRANTHES CANDIDA<br>RAIN LILY  | 1 GAL.      |            |                            |
|   | ALL NEW LANDSCAPE PLANTING AREAS TO RECEIVE 2"<br>MIN. DEPTH (AFTER SETTLEMENT) 1/2" PALOMINO GOLD<br>DECOMPOSED GRANITE. SAMPLE TO BE SUBMITTED AND<br>APPROVED BY OWNER PRIOR TO ORDERING. |             | 3,150 S.F. |                            |
|  | CONCRETE HEADER  |             | 135 L.F.   |                            |
|  | TURF - 'BOB SOD'   |             | 420 S.F.   |                            |

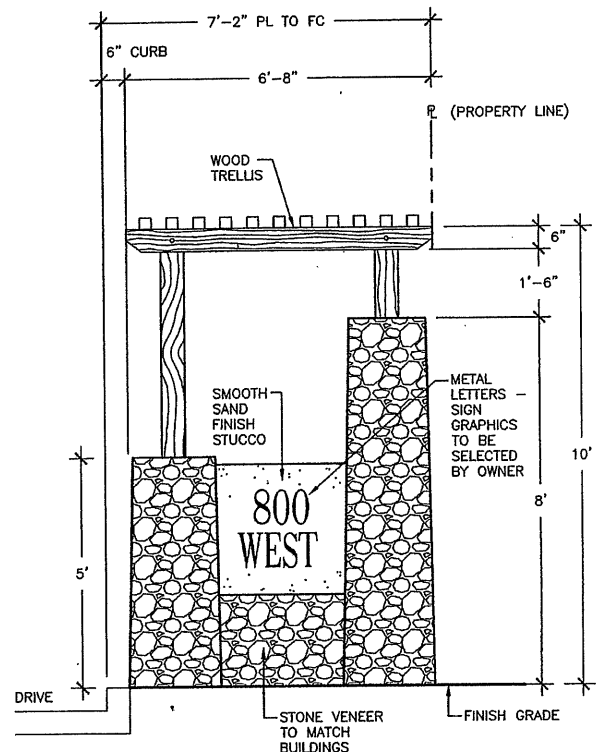
### IRRIGATION NOTE

ALL NEW LANDSCAPE AREAS TO BE IRRIGATED BY MEANS OF A FULLY AUTOMATED IRRIGATION SYSTEM. PLANTINGS WILL BE DRIP IRRIGATED AND NEW LAWN AREAS WILL BE IRRIGATED BY MEANS OF SMALL RADIUS POP UP SPRAYS.

### PROJECT LANDSCAPE DESIGN NARRATIVE

THE GOAL OF THIS PROJECT IS TO ENHANCE THIS SITE'S ARCHITECTURAL DESIGN, PROVIDE A LANDSCAPE DESIGN THAT MEETS ALL OF THE CITY OF TEMPE REQUIREMENTS, PROVIDE SCREENING FROM ADJACENT PROPERTIES, PROVIDE SAFETY FOR RESIDENTS, AND HARMONIZE WITH THE DESIGN SCHEME OF SURROUNDING PROPERTIES. THE PLANTS WERE SELECTED FOR THIS PROJECT TO PROVIDE YEAR ROUND INTEREST THROUGH COLOR, TEXTURE, AND VARIETY. THIS LANDSCAPE DESIGN COMPLIES WITH ALL REQUIREMENTS SPECIFIED IN SECTION 4-702 AND SECTION 4-703 IN PART 4, CHAPTER 7, OF THE CITY OF TEMPE ZONING AND DEVELOPMENT CODE.

- THERE IS NO TURF IN THE PUBLIC RIGHT OF WAY.
- MATERIALS PROPOSED IN THIS DESIGN COMPLY WITH THE LOW WATER USE / DROUGHT TOLERANT PLANT LIST.
- ALL LANDSCAPE AREAS HAVE VEGETATIVE COVERAGE OR DECOMPOSED GRANITE.
- ADJACENT PROPERTIES TO THIS PROJECT HAVE BEEN SCREENED USING ACACIA STENOPHYLLA AT 15' ON CENTER.
- SIGHT VISIBILITY LINES AT THE PROJECT ENTRANCE HAVE BEEN INDICATED AND ALL SHRUBS OR GROUND COVERS WITHIN THE SIGHT VISIBILITY LINES DO NOT EXCEED TWO (2) FEET IN HEIGHT.
- ALL GROUND COVERS AND SHRUBS WITHIN SIX (6) FEET OF THE BACK OF WALK COMPLY WITH THE TWO (2) FOOT HEIGHT RESTRICTION.
- ALL GROUND COVERS AND SHRUBS BETWEEN SIX (6) FEET AND TWELVE (12) FEET OF THE BACK OF WALK COMPLY WITH THE THREE (3) FOOT HEIGHT RESTRICTION.
- TWO TREES ARE REQUIRED AND ARE PROVIDED FOR THE UNIVERSITY DRIVE FRONTAGE. THE 'HERITAGE' LIVE OAK WAS SELECTED AS THE STREET THEME TREE TO MATCH THE STREET TREES OF SURROUNDING PROPERTIES.



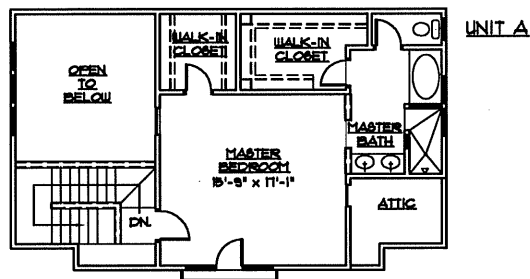
ENTRY SIGN ELEVATION

SCALE: 1/2" = 1'-0"

DEC 24 2007

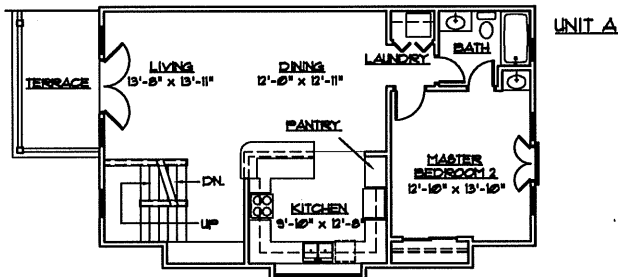
REVISIONS:

NOTES:



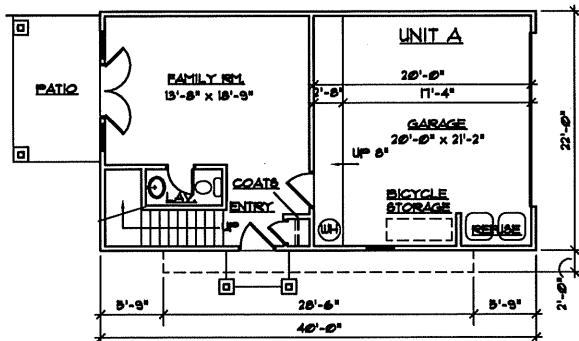
THIRD FLOOR PLAN

SCALE: 1/8"=1'-0"



SECOND FLOOR PLAN

SCALE: 1/8"=1'-0"



FIRST FLOOR PLAN

SCALE: 1/8"=1'-0"



# 800 WEST Townhomes

Project #R-0502  
Date:

800 West University Drive  
Tempe, Arizona

**RICHARD D. SOURBRINE, II** AIA  
arizona ■ california ■ ohio

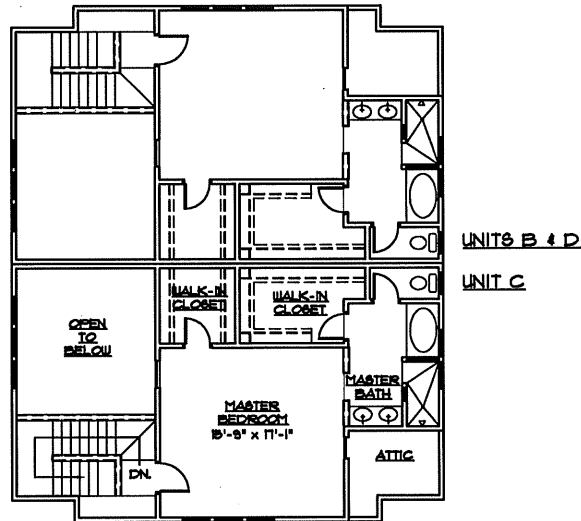
3445 West Louise Dr.  
Phoenix, Arizona 85027  
phone/fax 623.581.1501

Floor Plans -  
UNIT A FEB 19 2008

Aia

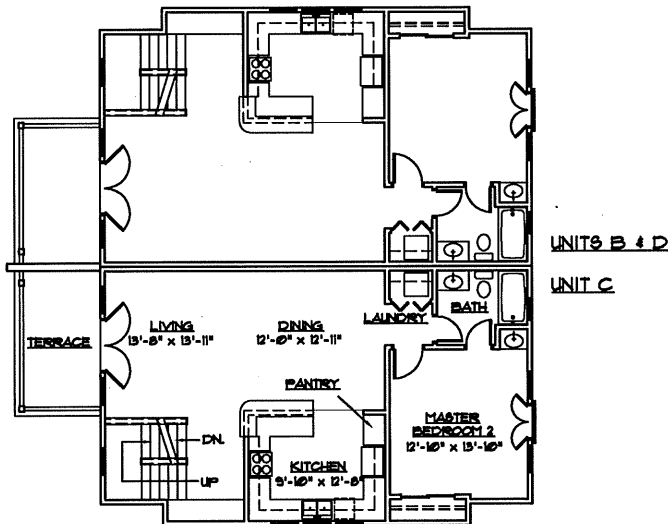
REVISIONS:

NOTES:



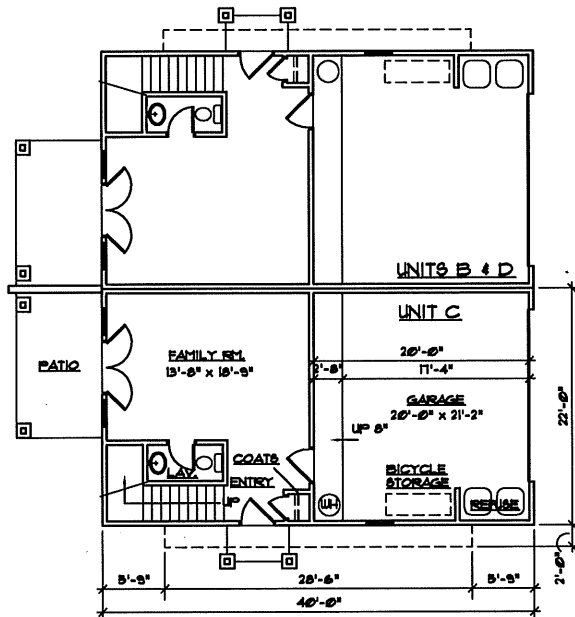
THIRD FLOOR PLAN

SCALE: 1/8"=1'-0"



SECOND FLOOR PLAN

SCALE: 1/8"=1'-0"



FIRST FLOOR PLAN

SCALE: 1/8"=1'-0"



## 800 WEST Townhomes

Project #R-0502  
Date:

800 West University Drive  
Tempe, Arizona

**RICHARD D. SOURBRINE, II** AIA  
a r c b i t e c t  
arizona ■ california ■ ohio

3445 West Louise Dr.  
Phoenix, Arizona 85027  
phone/fax 623.581.7501

Floor Plans -  
UNITS B, C, & D

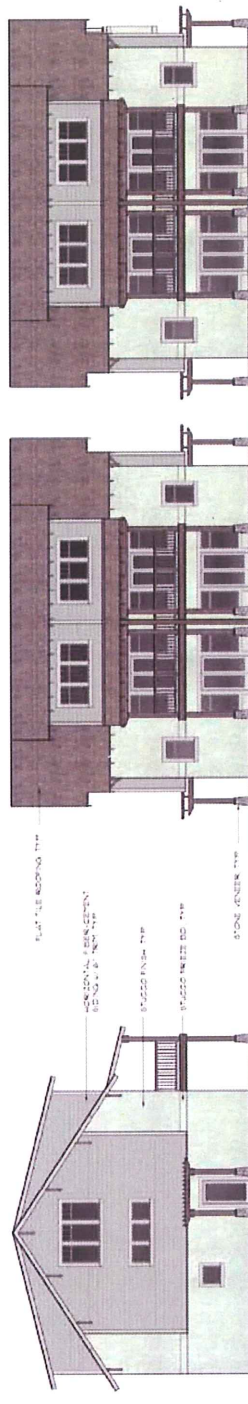
FEB 19 2008

1



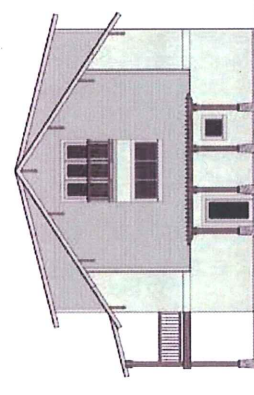
REVISIONS

NOTES

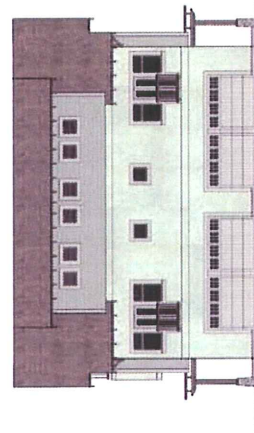


NORTH ELEVATION  
SCALE 1/8" = 1'-0"

WEST ELEVATION  
SCALE 1/8" = 1'-0"



SOUTH ELEVATION  
SCALE 1/8" = 1'-0"



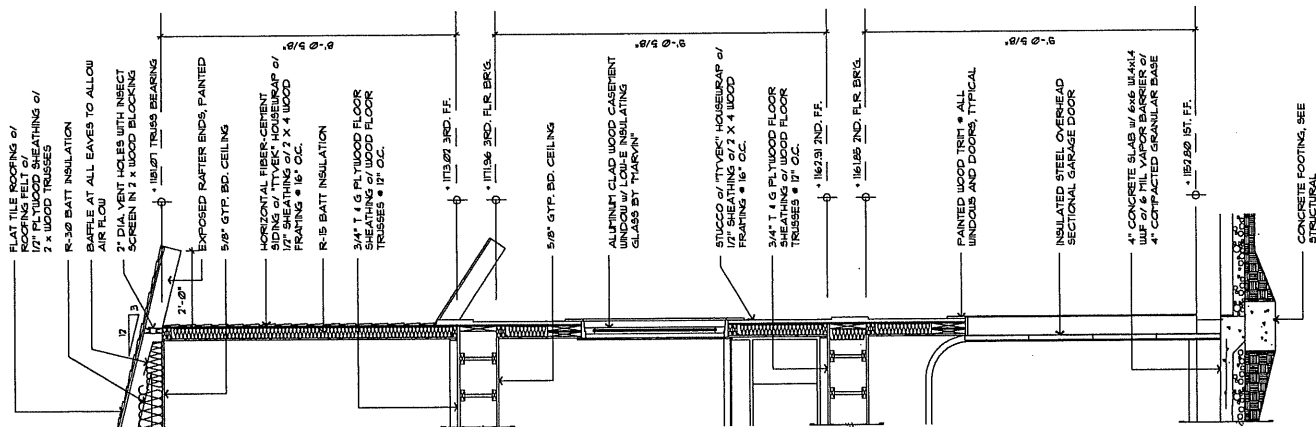
EAST ELEVATION  
SCALE 1/8" = 1'-0"



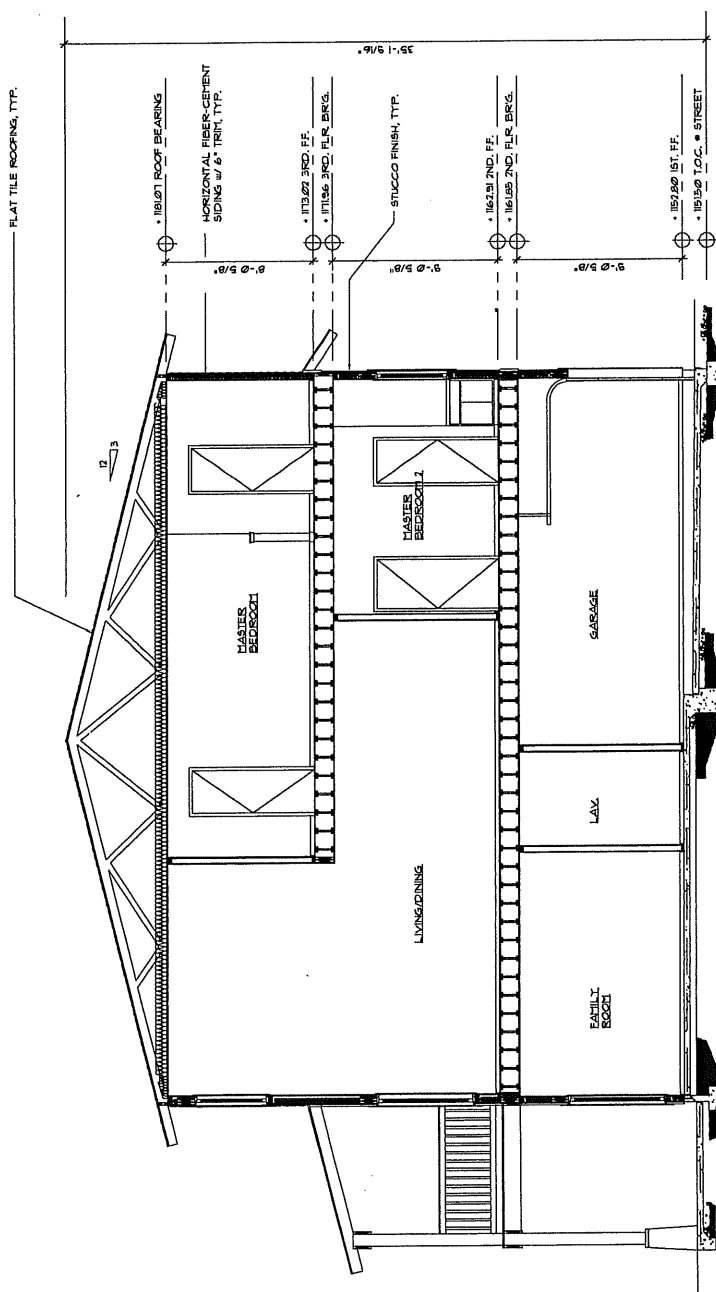
800 WEST  
Tourbomes

ARCHITECT  
RICHARD D. SOURBAINE, AIA  
1000 WEST 10TH AVENUE, SUITE 100  
DENVER, CO 80202  
TEL: 303.733.8800  
FAX: 303.733.8801  
WWW.RDSOURCE.COM

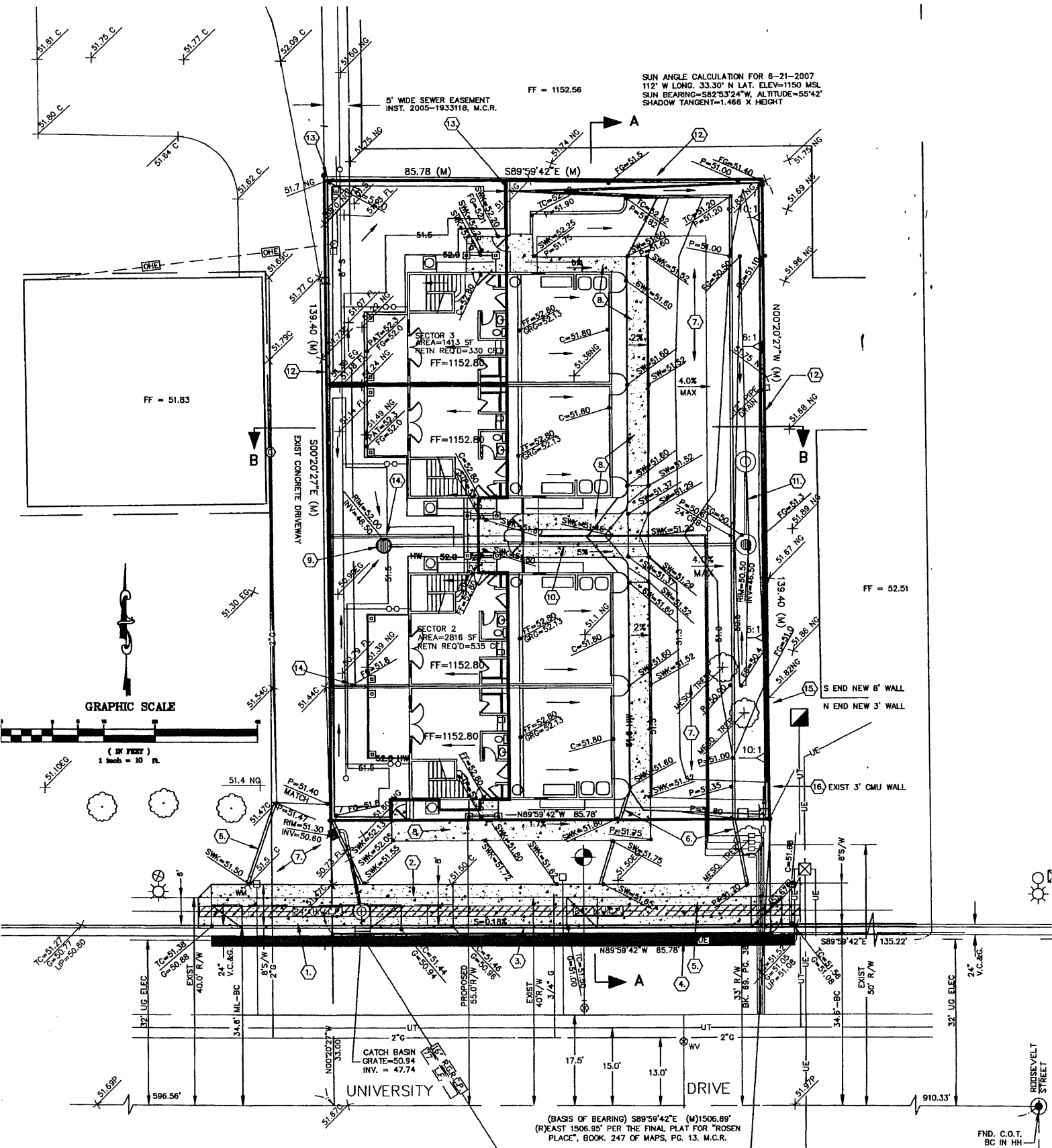
A3



WALL SECTION  
SCALE: 3/4"=1'-0"



BUILDING SECTION  
SCALE: 1/4"=1'-0"



SUN ANGLE CALCULATION FOR 6-21-2007  
 112° W LONG. 33.30° N LAT. ELEV.=1150 MSL  
 SUN BEARING=S82°53'24"W ALTITUDE=55°42'  
 SHADOW TANGENT=1.466 X HEIGHT

FF = 1152.56

FF = 51.83

FF = 52.51

UNIVERSITY

DRIVE

(BASIS OF BEARING) S89°59'42"E (M)1506.89'  
 (R)EAST 1506.85' PER THE FINAL PLAT FOR "ROSEN  
 PLACE", BOOK 247 OF MAPS, PG. 13, M.C.R.

FND. C.O.T.  
 BC IN HH

|  |  |   |  |
|--|--|---|--|
|  |  | <b>BRADY-AULERICH &amp; ASSOCIATES, INC.</b><br>CIVIL ENGINEERING - LAND SURVEYING<br>1030 E. Guadalupe Road<br>Tempe, Arizona 85283<br>Phone (480) 839-4000 Fax (480) 345-9259 |  |
|  |  | DENNIS H. BRADY P.L.S. ROBERT N. HERMON P.E.<br>CHRISTOPHER E. AULERICH P.L.S.  |  |
|  |  | <b>800 W UNIVERSITY</b>   |  |
|  |  | DATE 09/11/07<br>SCALE: 1"=10'  | DRAWN BY: RNH<br>CHECKED BY: RNH<br>JOB NO. 061101 |

# GRADING & DRAINAGE PLAN

## CONSTRUCTION NOTES

1. REMOVE EXIST 30' CONC D/WY & 5' WINGS. REPLACE WITH 25' D/WY PLUS 6' WINGS AS SHOWN. TEMPE DETAIL T-320 MODIFIED AS SHOWN
2. REMOVE EXISTING SIDEWALK WITHIN LIMITS OF IRRIG PIPE REPLACEMENT INSTALL NEW SWK AS SHOWN PER TEMPE DET. T-345 & MAG DET 230
3. REMOVE EXIST VERT C&G AND REPLACE BETWEEN DRIVEWAYS PER MAG DET 220 A
4. SAWCUT (MIN 2' WIDTH) & REMOVE EXIST ASPHALT PAYMENT AND REPLACE IN KIND AS DIRECTED BY CITY OF TEMPE AS SHOWN
5. INSTALL 30' DRIVEWAY PER TEMPE DETAIL T-320
6. INSTALL SINGLE CURB PER MAG DET 222
7. INSTALL 2.5" ASPH (MAG C-3/4) OVER 6" ABC PER MAG SEC 710
8. INSTALL 4" CONC SIDEWALK PER ARCH PLANS
9. INSTALL BUBBLER BOX PER DETAIL ON SHEET C-4
10. INSTALL 6" HDP PLASTIC DRAIN PIPE AS SHOWN
11. INSTALL MAXWELL PLUS DRY WELL PER DETAIL ON SHEET C-4
12. REMOVE EXIST 6' BLOCK WALL AND REPLACE WITH 8' CMU WALL PER ARCHITECTS STRUCTURAL DETAIL
13. INSTALL 16"x8" WALL OPENING IN NEW CMU WALL. FL=52.00
14. CONSTRUCT 16"x8" OPENING IN NEW CMU WALL. FL=51.80
15. INSTALL STEPS AS DIRECTED BY ARCHITECT

## RUNOFF VOLUME REQUIRED

RUNOFF COEFFICIENT (C) = 0.95  
 RAINFALL DEPTH (D) = 0.20 FT.  
 AREA (A) = SECTOR AREA  
 $V = (C)(D)(A)$

SECTOR #1 (AREA = 6,454 S.F.)

$V = (0.95)(0.20)(6454)$   
 $V = 1,226$  C.F.

SECTOR #2 (AREA = 2,801 S.F.)

$V = (0.95)(0.20)(2801)$   
 $V = 532$  C.F.

SECTOR #3 (AREA = 1,417 S.F.)

$V = (0.95)(0.20)(1417)$   
 $V = 269$  C.F.

## RETENTION PROVIDED

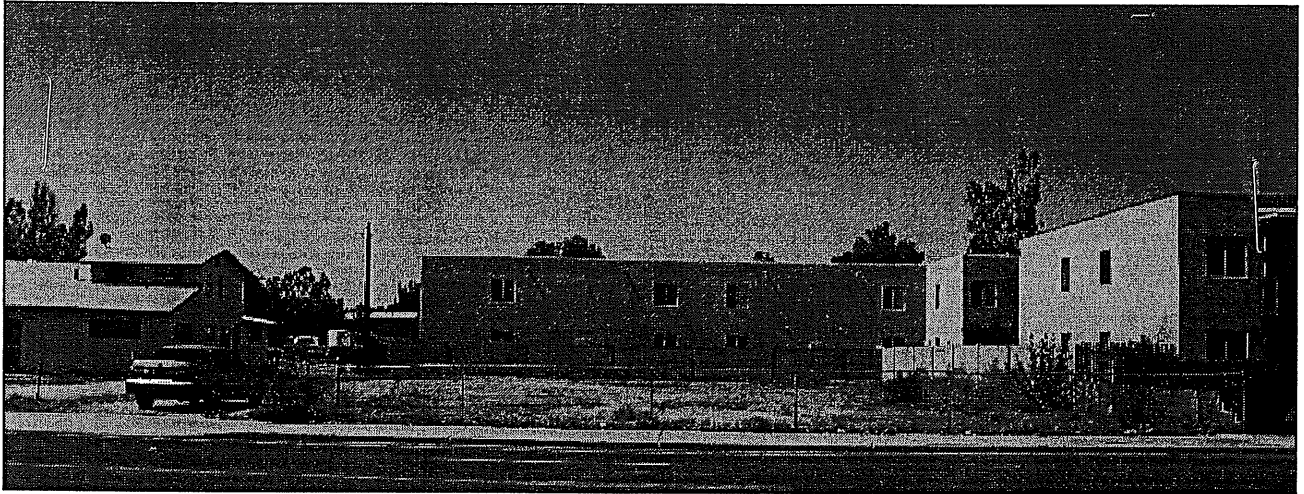
| CONTOUR ELEVATION (FT) | PLANIMETER AREA (IN) <sup>2</sup> | ACTUAL AREA (FT) <sup>2</sup> | AVERAGE AREA (FT) <sup>2</sup> | CONTOUR INTERVAL (FT) | VOLUME (FT) <sup>3</sup> | Σ VOLUME (FT) <sup>3</sup> |
|------------------------|-----------------------------------|-------------------------------|--------------------------------|-----------------------|--------------------------|----------------------------|
| 50.1                   | —                                 | 0                             |                                |                       |                          | 0                          |
| 50.5                   | —                                 | 120                           | 60                             | 0.4                   | 24                       | 24                         |
| 51.0                   | —                                 | 806                           | 463                            | 0.50                  | 232                      | 256                        |
| 51.3                   | —                                 | 2024                          | 1415                           | 0.50                  | 424                      | 680                        |
| 51.5                   | —                                 | 2740                          | 2384                           | 0.20                  | 477                      | 1157                       |
| 51.6                   | HW                                | 3260                          | 3000                           | 0.10                  | 300                      | 1457                       |
| 51.5                   | —                                 | 494                           | 717                            | 0.50                  | 358                      | 0                          |
| 52.0                   | HW                                | 940                           |                                |                       |                          | 358                        |
| 51.5                   | —                                 | 415                           | 552                            | 0.50                  | 276                      | 0                          |
| 52.0                   | HW                                | 688                           |                                |                       |                          | 276                        |

TOTAL RETENTION PROVIDED 2091 CF

TOTAL RETENTION REQUIRED 2111 CF

ATTACHMENT 21

PHOTO C 2000







VIEW LOOKING NORTH  
12.20.2007







VIEW LOOKING SOUTH  
12.20.2007







VIEW LOOKING EAST  
12.20.2007